

Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application:

1.-27. (canceled)

28. (previously presented) An oligonucleotide composition derived from genomic DNA, said composition comprising:

a plurality of pairs of sequence tags, each pair of said plurality being from opposite ends of a restriction fragment of genomic DNA, and each pair being from nine to eighteen basepairs in length.

29. (previously presented) The oligonucleotide composition of claim 28, wherein said restriction fragment has ends produced by digestion with different restriction endonucleases.

30. (previously presented) The oligonucleotide composition of claim 29, wherein said restriction fragment has ends produced by digestion of two different restriction endonucleases selected from a group consisting of three different restriction endonucleases.

31. (previously presented) The oligonucleotide composition of claim 30, wherein each of said three different restriction endonucleases has a six-basepair recognition site.

32. (previously presented) The oligonucleotide composition of claim 28, wherein said plurality is a sample having a size sufficient to contain with a

probability of ninety-nine percent at least one copy of each of said pairs of sequence tags.

33. (previously presented) The oligonucleotide composition of claim 28, wherein each sequence tag of each of said pairs contains the same number of basepairs.